

CLAIMS

1. A reciprocating-piston machine, in particular a refrigerant compressor (1) for a motor vehicle air-conditioning system, comprising
 - a machine shaft (2) rotatably supported in a machine housing (3),
 - a plurality of pistons (4) arranged circularly on a cylinder envelope extending around said machine shaft (2) in said machine housing (3),
 - an annular pivoting disc (5) disposed around said machine shaft (2) along said envelope and being driven by said machine shaft (2),
 - said annular pivoting disc (3) engaging the pistons (4) via a joint arrangement (6),
 - a driver (7) mounted on said drive shaft (2) and extending therefrom to said pivoting disc and being connected thereto in an articulated manner for transmitting drive forces to said pivoting disc (5),
 - and a sliding body (9) axially movably supported on said machine shaft (2),
 - said pivoting disc being supported on said sliding body (9) so as to be pivotable about a hinge axis (8) oriented transversely to said machine shaft, and
 - said driver (7) having an articulation portion (7a), which is located outside a main center-plane (10) which extends perpendicularly to the hinge axis (8) and through the axis of rotation (11) of the machine shaft (2).
2. A reciprocating-piston machine according to claim 1, wherein the articulation portion (7a) is located approximately on said cylinder envelope, which contains the piston axes (12).

3. A reciprocating-piston machine according to Claim 1, wherein contact points between the articulation portion (7a) and the pivoting disc (5) are located approximately on said cylinder envelope which contains the piston axes (12).
4. A reciprocating-piston machine according to claim 1, wherein said driver (7) has an axis (13) which extends approximately at a right angle with respect to the axis of rotation of the machine shaft (2).
5. A reciprocating-piston machine according to claim 1, wherein
 - said driver (7) has a fastening portion (7c) with a non-circular fastening cross section, and
 - said machine shaft (2) has an opening (2a) which extends through the machine shaft and has a cross-section corresponding to that of said driver (7) for tightly receiving said driver (7),
 - the longest extent of the non-circular fastening cross-section being arranged in a plane defined by the hinge axis (8) of the pivoting disc (5) and the driver axis (13).
6. A reciprocating-piston machine according to Claim 5, wherein the driver (7) is held in the machine shaft (2) by means of a press fit.
7. A reciprocating-piston machine according to Claim 1, wherein
 - said driver (7) has a neck portion (7b) with a non-circular neck cross-section which changes, at least in sections, in the axial direction of the driver,
 - the longest extent of the non-circular neck cross-section extending approximately in the direction of a

geometrical center-plane (18) of movement of the pivoting disc (5).

8. A reciprocating-piston machine according to Claim 7, wherein said pivoting disc (5) includes
 - a radially oriented opening (14), into which the driver (7) extends in a pivotally movable manner, and
 - the dimensions of the neck cross-section (7b) being adapted to the space allowed in each case by the opening (14) in the end positions (5', 5'') of the pivoting disc (5).
9. A reciprocating-piston machine according to claim 1, wherein the driver (7) is an integral part of the machine shaft (2).